

## PROJECT DESCRIPTION

## GENERAL

This project involves the modification of the existing traffic control signal at the intersection of md 124 (Montgomery Village Avenue) and Midcounty Highway. The modification consists of the addition of a triple left turn movement on southbound Md 124 (Mid-County Hwy) and pedestrian upgrades.

## INTERSECTION OPERATION

- The existing westbound Midcounty Highway dual left turn shall become a triple left.
- Video detection shall be added to cover all legs of the intersection and video detection interface equipment shall be added to the existing cabinet.

## SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables to the appropriate terminals and shall properly label each cable. Contact Mr. Bobby Gonzales at 240-777-8761 seventy two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

## EQUIPMENT LIST

## A. EQUIPMENT TO BE SUPPLIED BY MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	QUANTITY
8088	D3-2 "Midcounty Hwy", sign (variable x 18") mast arm mounted.	1 Each
8088	D3-2 "Montgomery Village Av", sign (variable x 18") mast arm mounted.	1 Each
8088	R10-11A "NO TURN ON RED" sign, (24" x 30") mast arm mounted.	1 Each
8088	R3-5R "RIGHT TURN ONLY" sign, (30" x 36") mast arm mounted.	2 Each
8088	R3-5R "LEFT TURN ONLY" sign, (30" x 36") mast arm mounted.	3 Each
8103	27' steel pole with twin (60"-50") mast arms. (Note: Anchor bolts will be 2" x 90").	1 Each
8122	12", one-way, three-section (R,Y,G) traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	2 Each
8122	12", one-way, three-section (R,Y,G) (right arrows) traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	2 Each
8122	12", one-way, three-section (R,Y,G) (left arrows) traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	2 Each
8124	12", one-way, two-section (D,W) symbolic pedestrian signal head with adjustable bracket for pole mounting and cutaway visors.	2 Each
8126	Pedestrian pushbutton and pedestrian education R10-4(1) sign. (Note: Sign to read "PUSH BUTTON TO CROSS MONTGOMERY VILLAGE AVE")	1 Each
-	Video detector camera w/ coaxial cable (to be installed by County Forces)	4 Each
-	Video detection interface equipment.	1 Each

## B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	QUANTITY
2002	Test pit excavation.	6 C.Y.
8001	Concrete foundation.	5 C.Y.
8023	3" polyvinyl chloride electrical conduit (Schedule 80) (trenched).	45 L.F.
8028	4" polyvinyl chloride electrical conduit (Schedule 80) (pushed). (To be bored).	265 L.F.
8043	Ground rod, 3/4" diameter x 10' length with clamp.	1 Each

## EQUIPMENT LIST (CONT.)

## B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	QUANTITY
8063	Canoga 4-conductor electrical cable (No. 14 A.W.G.) (shielded).	725 L.F.
8064	2-conductor electrical cable (No. 14 A.W.G.).	700 L.F.
8066	5-conductor electrical cable (No. 14 A.W.G.).	1375 L.F.
8070	2-conductor electrical cable (No. 12 A.W.G.) copper type TC.	275 L.F.
8075	1-conductor electrical cable (No. 6 A.W.G.) stranded bare copper ground wire.	80 L.F.
8095	20' lighting arm.	1 Each
8097	250W-HPS luminaire.	1 Each
8131	Traffic signal handbox (pullbox).	3 Each
8143	Relocate sign (ground mounted).	1 Each
8157	Removal and salvage of steel pole with mast arm including foundation.	1 Each
8161	Removal of handbox.	4 Each
9001	Signal technician labor to reroute existing underground interconnect cable and remove lighting arm.	4 HRS

The contact persons for District #3 (Montgomery County) are as follows:

Mr. Lee Starkloff  
Assistant District Engineer - Traffic  
Phone: (301) 513-7318

Mr. Raleigh Medley  
Assistant District Engineer - Maintenance  
Phone: (301) 513-7304

Mr. Augie Rebish  
District Engineer - Utility  
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.  
Chief, Traffic Operations Division  
Phone: (410) 787-7630

SEQUENCE OF OPERATION SHEET  
MONTGOMERY VILLAGE AVENUE  
TRAFFIC OPERATIONS SECTION  
DIVISION OF TRAFFIC ENGINEERING  
MONTGOMERY COUNTY, MARYLAND  
MID COUNTY HIGHWAY AND  
MONTGOMERY VILLAGE AVENUE

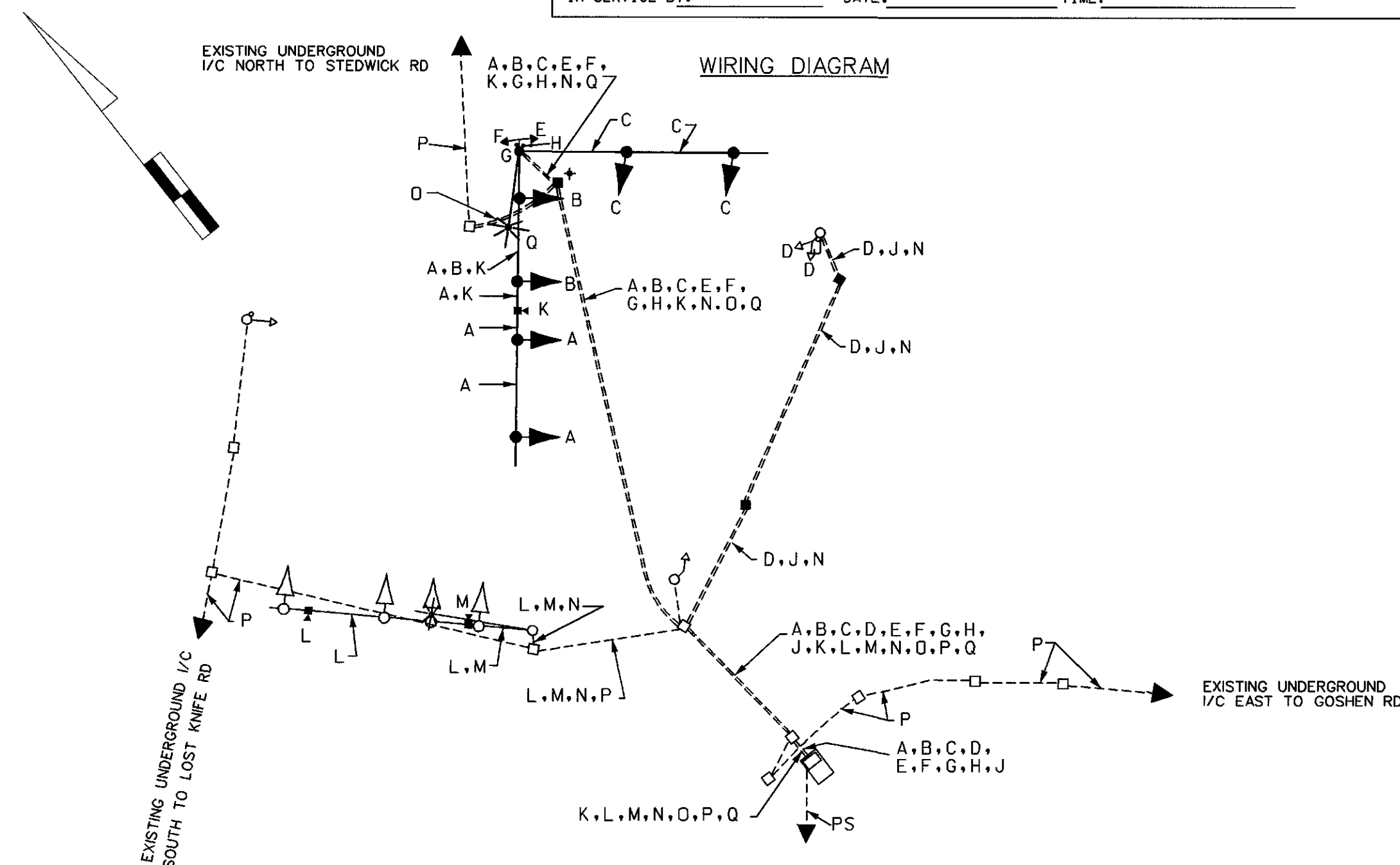
## INTERSECTION:

SIGNAL NO.	SIGNAL HEAD INDICATIONS				
	1, 2, 5, 6	3, 4, 7, 8		9, 10	11-16
TOTAL:					
LEGEND	(R)	(R)	(R)	(R)	(R)
OPTICALLY LIMITED	(Y)	(Y)	(Y)	(Y)	(Y)
R RED	(G)	(G)	(G)	(G)	(G)
Y YELLOW	(G)	(G)	(G)	(G)	(G)
G GREEN	(G)	(G)	(G)	(G)	(G)
ARROW	(G)	(G)	(G)	(G)	(G)
F FLASHING	(G)	(G)	(G)	(G)	(G)

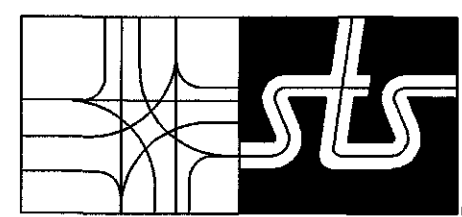
SIGNAL NO.	SEQUENCE OF OPERATION															F.A.H.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	Y
2	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	Y
3	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
4	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
5	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	Y
6	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	Y
7	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
9	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
10	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
11	WK	FL	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
12	WK	FL	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
13	DW	DW	DW	DW	WK	WK	WK	WK	FL	DW	DW	DW	DW	DW	DW	DARK
14	DW	DW	DW	DW	WK	WK	WK	WK	FL	DW	DW	DW	DW	DW	DW	DARK
15	DW	DW	DW	DW	WK	WK	WK	WK	FL	DW	DW	DW	DW	DW	DW	DARK
16	DW	DW	DW	DW	WK	WK	WK	WK	FL	DW	DW	DW	DW	DW	DW	DARK
PHASE	2 & 6	ALL RED	4 & 7 W/ DLB	4 & 8	ALL RED	2 & 5 W/ DLA	ALL RED									

NOTES: OLA W/ 05+08  
DLB W/ 07+08  
IF 02+05+DLA IS SKIPPED, SIGNALS 9 & 10 WILL BE Y- DURING INTERVAL 11 AND R- DURING INTERVAL 12.  
IF 07 IS CALLED THEN 08 PED WILL ALWAYS FOLLOW.  
\*04 & 07 WILL NOT SHOW ON CONTRAC WITH MXUC ON F.O. #1 & 2 WILL SHOW BACK TO BACK  
\*\*F.O. #1 IS APPLIED TO A PHASE 7 PED ONLY. SPLIT #2 COVERS PED TIME ONLY ON CONTRAC.

SUBMITTED:	CHECKED:	APPROVED:
IN SERVICE BY:	DATE:	TIME:



WIRING KEY	
A	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
B	3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
C	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
D	CANOGA 4-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) SHIELDED
E	COAXIAL CABLE (INCIDENTAL WITH PURCHASE OF CAMERA)
F	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
G	RELOCATED 12-PAIR VOICE GRADE INTERCONNECT CABLE (JELLY FILLED)
H	EXISTING 12-PAIR VOICE GRADE INTERCONNECT CABLE (JELLY FILLED)
I	2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
J	EXISTING UNDERGROUND SERVICE TO BE MAINTAINED BY PEPCO.
K	GROUND ROD



STREET TRAFFIC STUDIES, LTD.  
400 Crain Hwy., NW  
Glen Burnie, MD 21061  
Ph (410) 590-5500  
Fax (410) 590-6637

4020A .dgn



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
GENERAL INFORMATION SHEET  
MID COUNTY HIGHWAY  
AND MONTGOMERY VILLAGE AVENUE

DRAWN BY: ROB CICHINI	F.A.P. NO.	T.S. NO. 2412C	SHEET NO. 2 OF 2
CHECKED BY:	S.H.A. NO.	T.L.M.S. NO. F345	
SCALE: NA	COUNTY: MONTGOMERY		
DATE: 8/26/02	LOG MILE: 15012404.34		